A Guide to Weight Loss- > Simple Exercise Routines, Diet When Exercising, and Good Habits

By: Gustaf Axelryd, Licensed Physiotherapist in primary care

Preface

With this material, I want to illustrate in a general and simplified way how we can pave new health habits into our lives in terms of – exercise, diet, and generally good habits. My experience is mainly in my profession as a physiotherapist, with patient-oriented training and rehabilitation, where I have been active for 10 years. But I also have a lot of experience of training for myself, as I have practiced fitness, and many ball sports, and thus I have also engaged in the importance of diet and habits for the results you get. I have realized that every detail of what changes you make can make a big difference. Through the above experience of this, I have asked myself many questions over the years, which I have since sought answers to, A lot of questions and answers are in addition to my university competence, but which I still feel that I on the whole dare to stand for. The material is aimed at healthy individuals, and the dietary advice I would classify as "simple", and if you who read this feel that you are carrying an illness, injury or the like, I recommend you to consult the relevant healthcare provider first. I will also be open about saying that I have used Chat-gptn to produce large parts of the material, and to get a further development of many of the answers that I myself had already produced before. I therefore reserve the right for any errors that exist. However, I have read through this a lot of times and think that most of it is recognizable and rations well within me, and seems reasonable.

With this, I would like to wish you a good and pleasant reading

Created: Year 2025, website: www.gustafaxelryd.com

Table of contents (tap on the headings to get where you want to go)

- Page 1

  Basics for losing weight
- Page 2Morning routine and evening routine
- Page 2-6
  Review of training programs
- Page 6-9
  Nutrition in training
- Page 10-11
  Diet to maximize physical and mental performance
- Page 11-16
  General Advice/Good Habits
- Page 17-22
  Weight Loss Strategy
  - To keep the weight?
  - Clear comparison between healthy and unhealthy diet

1. The basis of weight loss

Your body uses energy (calories) every day – both when you move and when you rest.

- **Calories in** = the energy you get through food and drink.
- **Calories out** = the energy the body expends through basic functions (breathing, heartbeat, heat production), movement and exercise.

2. The balance

- If **calories in = calories out** → the weight stands still.
- If **calories are in < calories out** → the body has to take off its energy reserves (usually fat) → you lose weight.
- If **calories are > calories out**, the excess → is stored, mainly as fat → you gain weight.

3. Common misunderstandings

- **"You have to exercise a lot to lose weight."**
  Exercise helps, but most of the weight loss is controlled by the food you eat. Diet is often 70–80% of the result.
- **"All calories are equal."**
  Technically yes – but the quality of the food matters: 500 kcal from sweets is much less filling than 500 kcal from chicken, vegetables and potatoes. It affects how easy or difficult it will be to stick to a calorie deficit.

4. How to make it sustainable

- **Focus on nutritious foods:** vegetables, fruits, protein (meat, fish, eggs, beans), whole grains.
- **Avoid liquid calories:** soda, juice, and alcohol are not satiating.
- **Exercise for health and muscles:** strength training allows you to retain muscle as you lose weight, which keeps your metabolism higher.
- **Be patient:** 0.5–1 kg per week is a healthy pace.

In short: weight loss is about being in a **calorie deficit**, but the road to get there will be much easier and more sustainable if you choose good food and combine it with exercise.

More in-depth on how you can lose weight comes at the end of this material – see table of contents. Before that, I want to go through basic training habits and nutrition on how to build muscle, as well as generally good habits to get into a good life pattern. It makes it easier when you want to lose weight.

Morning routine

Set the mark and standard for the day with Morning Routines (set aside 30-40 minutes for this by getting up earlier – I promise, you will make up for the time by far, not least by becoming more efficient in everything you do):

- With the right morning routines, you can actually have a big impact on how you want your day to shape and what you want to get out of the day. Take control yourself through this.
- Take a cold shower. Start warming up with a hot shower, and then finish with a cold shower where you breathe slowly, in through your nose, and out through your mouth (if you hyperventilate, you lose the effect). This will kick-start your immune system, and metabolism, as well as make you feel more alert than 10 cups of coffee. You should not expose your head to the cold, only your body. Start by showering your back for 5 slow seconds, and then in front for 5 slow seconds.
- Training ritual, some exercises, raises sharpness + discipline for the rest of the day, and gets the metabolism going.
- Start the day with a large glass of water. Eat your energy-rich breakfast, and be sure to clean up after yourself so that you clear your mind, so it has peace.
- You are now ready for the day!

Evening routine

"If you don't wind up during the day, you don't have to unwind in the evening"

- Despite this, it can be smart to close down all screens and put the phone away at the last hour. Yes, even the TV is smart to shut down. Avoid the blue light (lowers melatonin production). Even if it doesn't feel like you've unwinded during the day, there's probably more stress in your body than you're aware of. Therefore, create this routine.
- Avoid seeing, hearing or reading too much negative in the evenings before you go to bed. The energy you fall asleep with is easy to wake up with. So give yourself good conditions to wake up refreshed for a new day and to get a peaceful night of sleep, without nightmares etc.
- Preferably avoid eating food after 6 p.m., then you get some intermittent fasting baked in, and the body does not have to digest heavy food during the night.

Review of training programs

The importance of posture

- Positive effects on the psyche
- Makes you feel more fit
    - You can be fit but look unfit and vice versa through good or bad posture

Posture may not be the first thing that comes to mind when it comes to weight loss, but it can actually play a role, both directly and indirectly:

Energy expenditure and muscles
• A good posture engages more muscles, especially the torso, back and buttocks.
• When you stand or sit upright, the muscles are activated more than if you "hang" with your body, which can increase energy expenditure a little over time (not as much as exercise, but it makes a difference in the long run).

2. Breathing and oxygen uptake

•Poor posture compresses the chest → poorer breathing → lower oxygenation.
• Good posture opens up the chest → more efficient breathing → better energy during exercise → you can perform more and burn more calories.

3. Mindset and body esteem
• Studies show that posture affects how we feel: upright posture can increase feelings of control, energy and motivation.
• It can make it easier to stick to an exercise routine or diet plan.

4. Risk of injury and joy of movement
• Poor posture can lead to pain in the back, neck and shoulders → you move less.
• Good posture → less pain → more natural activity in everyday life (walking, standing, exercising).

The purpose of the muscles included in the morning exercise routine:

Why strengthen the seat, trunk and erector spinae when sedentary?

When you sit a lot, three things happen:

• The seat becomes like a "switched off engine" – the muscles are not used and become weak.

• The torso (stomach and deep abdominal muscles) get less training in stabilizing the body.

• The erector spinae (the dorsal extensors along the spine) are stretched and lose strength.

1. Glutes (buttocks)

• **Function:** Pulls the hip back, stabilizes the pelvis and helps you get up and walk.

• **Benefits:** A stronger seat means that the pelvis does not tip forward when you stand and walk, which reduces strain on the lower back.

• **Posture:** Think that the seat is like the foundation of a house – if it is weak, the whole building is leaning.

2. Trunk (abdominal muscles, both superficial and deep)

• **Function:** Stabilizes the entire torso and distributes the load evenly between the back and stomach.

• **Benefit:** A strong torso prevents the spine from collapsing forward when sitting or standing.

• **Posture:** As a corset-like internal support that keeps your upper body straight, even when you get tired.

3. Erector spinae (dorsal extensors)

• **Function:** Stretches and stabilizes the spine, allows you to stay upright.

• **Benefits:** Counteracts leaning, slumped posture that is common during a lot of screen time.

• **Posture:** Imagine two strong wires along your back pulling you up towards the ceiling.

Why this affects posture

Posture is basically the balance between muscle forces at the front and back of the body.

• If the seat, torso and back extensors are weak, → the pelvis tilts, the back is rounded and the shoulders move forward.

• If they are strong, → the pelvis is neutral, the back is kept straight and the head ends up above the body instead of in front of it.

A simple parable:

The body is like a tent.

• **The seat** is the tent pegs at the back that hold the bottom in place.

• **The torso** is the tent fabric that holds the structure together

• **The Erector Spinae** is the tent pole that keeps everything upright.

If you remove a part – the whole tent will collapse.

Daily Exercise Routine Monday to Friday (time required approx. 10 min):

Stomach

1 set of regular sit-ups with 3 sec stop in the outer position, to failure,
https://www.youtube.com/watch?v=swOyWKk7Oko

1 set, Superset 6 exercises (i.e. no rest between the exercises below):

- Mountain climber 10 reps, https://www.youtube.com/watch?v=kLh-uczlPLg

- Plank jump ins 10 reps, https://www.youtube.com/watch?v=Hf7-UTFyBoE

- Spiderman Mountain Climber 10 reps,
https://www.youtube.com/watch?v=oGG3On4DxWQ (at a faster pace)

- Plank up and down 10 reps,
- https://www.youtube.com/watch?v=L4oFJRDAU4Q

- Sneda situps 20 reps,
- https://www.youtube.com/watch?v=D9eiifR5sKk

- Hallow Hold Leg Flutter with 5kg dumbbell (see picture+link), 20 reps,
- https://www.youtube.com/watch?v=F8fhsu9-Lu8

Back muscles – erector spinae mainly

• Prone back lift, hold for 3 seconds in each lift, 2 sets to failure

Saturation muscles

• Pelvic lift 1-2 sets, to failure.

Basic exercise; Includes gluteal, back, and leg muscles

• If time and opportunity, 1-2 sets of Jefferson's curl with kettlebell or barbell 8-12 reps.

https://www.youtube.com/watch?v=NFXqqvZGAHY

• If possible: Rowing interval if possible, 1min*3 at 95% of max. Alt run interval to work of max 3 km to work, 1 min interval interspersed with walking.

Saturday-Sunday (rest days, time consumption approx. 2 min)

Light activation of the seat, torso, and back: 1 set of sit-ups, 1 set of bench lifts, 1 set of back lifts

Nutrition during exercise:

Amount of calories

How many calories does the daily requirement normally cover?

- Men 70-85kg, 2200-2500 kcal/day (rest days), 2800-300 kcal/day (moderate activity), 3200-3500 kcal/day (high activity)
- Women 55-70kg, 1800-2000 kcal/day (rest days), 2200-2400 kcal/day (moderate physical activity), 2500-2800 kcal/day (high activity)
- Age (3-500kcal difference 30-80 years) and size (60kg-versus 90kg, 3-500 kcal difference) affect
- Excess (200-300 kcal extra/day (lean bulk) to maximize)

Amount of protein

The difference between, for example:

- For an adult who **does not exercise regularly** (sedentary)
    - **Recommended intake:**
      0.8 grams of protein per kilogram of body weight per day
      (according to WHO and Nordic nutrition recommendations)1g/kg body weight

For an adult who exercises regularly:

1. General exercise/exercise (2–3 times/week, low to medium intensity)

- **1.2–1.6 g/kg body weight/day**

2. Strength training with the goal of building muscle

- **1.6–2.2 g/kg body weight/day**

3. Endurance training (running, cycling, etc.)

- **1.2–1.8 g/kg body weight/day**

4. In case of calorie restriction (e.g. deffa, weight loss)

- **2.0–2.5 g/kg body weight/day** is often recommended to preserve muscle mass.

Example 1:

- If you weigh 100kg and need to get 0.8g/kg body weight/day = 80g per day (0.8*body weight)
- if you weigh 100kg and need to get 1.0g/kg body weight/day = 100g per day
- If you weigh 100kg and need to get 1.6g/kg body weight/day = 160g per day
- If you weigh 100kg and need to get 2.2g/kg body weight/day = 220g per day

Example 2:

- Increasing your protein intake from **0.8 g/kg** (recommended intake for sedentary sitting) to around **1.6–2.2 g/kg will lead to increased muscle mass**, *provided you do strength training* regularly.
- **The difference in muscle building over 3 months (about 12 weeks)** between low and high protein groups can be **0.5–1.0 kg of extra muscle mass**, sometimes more, depending on the individual's level of exercise, diet in general and genetics.

Here's a breakdown of the approximate protein per 100 grams for these foods:

- **Fisk** (t.ex. lax, torsk, sej): ca **18–25 g** protein
  - Cod: ~18 g
  - Salmon: ~20 g
- **Meat** (beef, pork): approx. **20–25 g**
  - Ground beef (lean, 10% fat): ~20 g
  - Pork: ~21 g
- **Chicken** (breast, skinless): approx. **22–23 g**
- **Eggs**: about **12–13 g** (per 100 g, i.e. about 6 g per egg)
- **Quark** (natural, 1–3% fat): approx. **10–12 g**
- **Cottage cheese** (cottage cheese, 1–4% fat): about **11–12 g**

Here's a clear overview of the differences in satiety (how filling a nutrient is) between protein, carbs, and fat:

---

1. Protein – most filling

- **Saturation:** Highest of the three macronutrients.
- **Why it satisfies:**
  - Protein stimulates hormones such as **GLP-1, PYY, and CCK**, which signal satiety to the brain.
  - Protein slows down gastric emptying, which means that food stays longer in the stomach.
- **Examples of satiating protein sources:** Chicken, eggs, beans, fish, nuts.

---

2. Carbohydrates – varying degrees of satiety

- **Saturation:** Medium, but depends a lot on type:
  - **Fiber-rich carbohydrates** (vegetables, whole grains, legumes) are very filling.
  - **Fast carbohydrates** (sweets, white bread, soft drinks) are short-term satiating and often lead to new hunger quickly.
- **Why it satisfies:**
  - Fiber provides volume without much energy → fills the stomach.
  - Fast carbohydrates raise blood sugar quickly → insulin rises → blood sugar drops lead to hunger.

---

3. Fat – energy-dense but less filling

- **Saturation:** Low to medium compared to protein.
- **Why it is less filling:**
  - Fat provides a lot of energy (9 kcal/g), but does not stimulate satiety hormones as effectively as protein.
  - Slower digestion can provide some satiety, but the feeling of fullness often comes later.
- **Examples:** Olive oil, butter, avocado, nuts.

Summary:
Protein > Fiber & Slow Carbohydrates > Fat > Fast Carbohydrates in Satiety. Protein is therefore best if the goal is to feel full for a long time.

Supplements

Protein powder just over 20g per serving – I prefer the brand Holistic, no additives and from Swedish farms

- Animal protein: whey protein, egg protein, casein protein
- Vegetable protein: Soy protein, Pea protein

Protein powder is good to mix into smoothies. Suggestions for healthy smoothies:

- Almond milk, almond butter, frozen banana, frozen blueberries, spinach leaves, holistic whey vanilla protein
- Almond milk, banana, spinach, frozen mango, avocado, banana, holistic whey vanilla protein
- Almond Milk, Coconut Milk, Frozen Mango, Banana, Holistic Whey Vanilla Protein

Creatine: there are supplements, but I prefer to get it naturally. Below are some examples

- **Beef**
- **Pork**
- **Chicken**
- **Salmon**
- **Cod**
- **Herring**
- **Tuna**
- **Other high-fat fish such as mackerel and sardines**

Minerals

- **Magnesium**
  - Important for muscle function, energy metabolism and recovery.
  - Helps reduce muscle cramps and fatigue.
- **Zinc**
  - Contributes to the immune system, wound healing and protein synthesis.
  - Also affects testosterone levels and muscle growth.

- **Iron**
    - Essential for oxygen transport in the blood (via hemoglobin).
    - Deficiency can lead to fatigue and reduced performance, especially in women.
- **Potassium**
    - Important for nerve signaling and muscle contractions.
    - Helps regulate fluid balance.
- **Calcium**
    - Necessary for muscle contraction and bone health.
    - It is important to have enough calcium to prevent damage.

- **Selenium**
    - Antioxidant that protects cells from oxidative stress after exercise.
    - Supports the immune system.
- **Copper**
    - Helps with energy metabolism and the formation of red blood cells.

Diet that negatively affects physical and mental performance

- Sugar and refined carbohydrates
- Fatty foods, especially saturated and trans fats
- Alcohol
- Caffeine
- Processad mat
- Low in protein
- Too much salt
- Low intake of micronutrients (vitamins and minerals)
- Excessive fat intake (especially from animal sources)

Diet to maximize physical and mental performance:

Nutrition suggestions for maximum physical & mental performance

1. Complex carbohydrates (for stable energy)

- Oatmeal
- Quinoa
- Whole grain products (rye bread, whole grain rice)
- Sweet potato
- Legumes (lentils, beans, chickpeas)

2. High-quality protein (for muscles and brain)

- Lean meat (chicken, turkey)
- Fatty fish (salmon, mackerel, herring) – rich in omega-3
- Egg
- Greek yogurt or quark
- Vegetable proteins such as pea protein and soy protein

3. Healthy fats (for brain function and anti-inflammation)

- Avocado
- Nuts and seeds (walnuts, chia seeds, pumpkin seeds, flaxseed)
- Extra virgin olive oil
- Fatty fish (omega-3)
- Cold-pressed rapeseed oil

4. Vegetables and fruits (antioxidants & micronutrients)

- Green leafy vegetables (spinach, kale, arugula)
- Broccoli, cauliflower, Brussels sprouts
- Berries (blueberries, raspberries, strawberries)
- Citrus fruits
- Paprika

5. Fluid and electrolytes

- Water regularly throughout the day
- Natural electrolyte sources: coconut water, cucumber, celery
- Avoid sugary drinks and excessive caffeine

6. Micronutrients to prioritize

- **Magnesium** – muscle relaxation, nerve function (nuts, seeds, leafy greens)
- **Zinc** – immune system, energy production (meat, seafood, nuts)
- **Iron** – oxygen transport (red meat, spinach, beans)
- **B vitamins** – energy metabolism and nerve health (whole grains, eggs, meat)
- **Vitamin D** – energy and mood (oily fish, sun)
- **Antioxidants** – protect the brain (berries, vegetables)

7. Examples of snacks for energy and focus

- Nuts and seeds mix
- Natural yogurt with berries
- Carrot and celery sticks with hummus
- Smoothie with spinach, banana, berries and protein powder

General Advice/Good Habits

Importance of everyday exercise

- Everyday exercise, i.e. the physical activity we incorporate into our daily routines in addition to exercise, is of great importance for our health, metabolism and calorie metabolism. Here are some concrete aspects:

1. Health

- **Reduced risk of chronic diseases:** Regular everyday exercise reduces the risk of cardiovascular disease, type 2 diabetes, certain cancers and high blood pressure.
- **Better mental health:** Activity in everyday life releases endorphins and reduces stress, anxiety and the risk of depression.
- **Improved mobility and strength:** Moving frequently helps joints, muscles, and bones stay strong and flexible, reducing the risk of injury and falls.

2. Metabolism

- **Increased basal metabolism:** The more muscle and movement the body has, the higher the basal metabolic rate – i.e. the energy the body consumes at rest.
- **Improved glucose and fat metabolism:** Everyday exercise increases insulin sensitivity and helps the body better manage blood sugar and fat, reducing the risk of fat storage and metabolic diseases.

3. Calorie metabolism

- **Increased energy expenditure:** By walking, cycling, climbing stairs or standing more, you increase your total daily calorie expenditure without having to spend time on organized exercise.
- **Small activities count:** Choosing stairs instead of elevators, walking or biking to work, or standing and moving during conversations can increase energy expenditure by several hundred calories per day.

Concrete examples:

- Walking 10,000 steps per day can consume about 300–500 extra calories, depending on your pace and body weight.
- Standing instead of sitting during the workday can increase calorie expenditure by about 20-50 calories per hour.
- Taking stairs instead of elevators can burn an extra 5-10 calories per floor.

Summary:
Everyday exercise thus helps to keep the body active, improves metabolism, contributes to better calorie utilization, and promotes both physical and mental health – often with small efforts that can easily be incorporated into everyday life.

Everyday exercise

How much everyday exercise do I get? The more everyday exercise you can get in, the better. As we get older, we generally move less, which is why everyday exercise becomes so important to keep the metabolism going.

- Do I climb stairs (can be more worthwhile than going to the gym and doing step up 3*15 reps)
- Do I walk to the grocery store or work?
- Do I cycle to work? Start if you can!
- Do I take the car more than necessary?
- If you have the opportunity, feel free to start the day with a morning walk before you have eaten, it will speed up the metabolism.

If it is possible to get exercise at the beginning of the day, e.g. running to work, even if briefly, it can be partly;

- Raise the afterburn, but also
- Create behavioral effects "domino effects" that make you eat more balanced during the day, stay active, improve sleep.

Meaning of sleep

1. Sports performance

- Sleep improves muscle recovery and repairs injuries sustained during exercise.
- The hormone growth hormone that is released during deep sleep stimulates muscle building and fat burning.
- Improves responsiveness, coordination and endurance.
- Reduced sleep leads to poorer performance and an increased risk of injury.

2. Immune system

- Sleep strengthens the functioning of the immune system, increases the production of antibodies and white blood cells.
- During sleep, the body's defenses against infections and inflammation are activated.
- Lack of sleep is linked to an increased risk of colds, flu and chronic inflammatory diseases.

3. Mental acuity and cognitive function

- Sleep is essential for memory consolidation — the transfer of memories from short-term to long-term memory.
- Improves concentration, problem-solving skills, creativity, and decision-making.
- Sleep deprivation leads to poorer focus, learning, increased risk of accidents and poorer mental health.

4. Emotional health and stress management

- During sleep, the brain processes emotions and reduces stress levels.
- Sleep deprivation increases the risk of anxiety, depression and irritability.
- Regulates hormones that affect mood, such as cortisol and serotonin.

5. Physical health and recovery

- Sleep regulates metabolism and helps control body weight.
- Affects insulin and blood sugar levels — sleep deprivation increases the risk of type 2 diabetes.
- Helps repair cells and tissues, including the heart and blood vessels.
- Sleep lowers blood pressure and reduces the risk of cardiovascular disease.

6. Hormonal balance

- Sleep regulates hormones that affect hunger (ghrelin and leptin), growth, and stress (cortisol).
- A good night's sleep helps keep these hormones in balance, which affects appetite, energy, and recovery.

Risks of too little sleep

Studies show that people who sleep less than 6 hours per night are at higher risk of heart attack, stroke, sudden death from cardiovascular disease

This happens. During deep sleep, blood pressure goes down -> in case of sleep deprivation or shallow sleep ->

- does not drop blood pressure as it should, which contributes to chronic high blood pressure (hypertension) -> increases strain on the heart and blood vessels
- Increases inflammation in the body (chronic low-grade inflammation contributes to atherosclerosis)
- Stress systems become overactive
- Raises cortisol and adrenaline
- Which gives -> increased heart rate
- Tense blood vessels
- Higher blood pressure
    - Higher load on the heart
    - Interferes with blood lipids and sugar regulation

Poorer sleep -> poorer insulin sensitivity -> higher blood sugar -> unfavorable metabolic environment

<u>What can be done to improve sleep:</u>

1. Have regular routines

- Get up and go to bed at about the same time every day – even weekends.
- The body likes rhythm and builds its sleep cycle (circadian rhythm) according to your habits.

2. Get daylight early

- Go out in the morning sun (preferably within 30-60 minutes of waking up).
- Daylight early in the day helps your body produce melatonin later in the evening, making you tired at the right time.

3. Move – but not too late

- Physical activity (e.g., walking, strength training, jogging, yoga) improves sleep quality.
- Preferably exercise **early in the day or early evening at the latest** – too intense exercise late can disturb sleep.

4. Avoid caffeine after 2–3 p.m.

- Coffee, energy drinks, tea, and even chocolate contain caffeine.
- Caffeine has a half-life of 5–8 hours – it can remain in the body and interfere with falling asleep.

In the evening – prepare your body for sleep

Eating a diet that promotes melatonin production

- Warm flour (also soothing in the evening)
- Banana
- Fatty fish
- Kiwi, sour cherry
- Nuts, especially walnuts and pistachios
- Oatmeal
- Flaxseed

5. Create an evening routine

- Start unwinding 1-2 hours before bed.
- Turn on dim lights, avoid rowdy conversations, turn off work tasks.

6. Reduce screen time

- Avoid mobile phones, computers and TV at least **60 minutes before bedtime**.
- Screens emit blue light that inhibits melatonin production (the sleep hormone).
- Feel free to use "Night Shift" mode or blue light filters if you still need a screen.

7. Avoid heavy food & alcohol late

- Don't eat large meals just before bedtime – your stomach needs to rest.
- Alcohol can make you sleepy at first, but impairs the depth and quality of sleep.

8. Keep the bedroom cool and dark

- The optimum temperature is around **16–19°C**.
- Use blackout curtains and avoid noise (or have white noise).

Positive effects of cold showers

- **1. Improved circulation**
- Cold exposure causes blood vessels to constrict (vasoconstriction) and then dilate again as the body heats up, which can improve blood circulation and blood flow.
- **2. Increased alertness and energy**
- Cold stimulation activates the sympathetic nervous system, which increases adrenaline levels and provides a more alert and alert feeling.
- **3. Strengthened immune system**
- Studies on the Wim Hof method show that cold exposure and breathing exercises can increase the production of anti-inflammatory cytokines and positively affect the immune system, which can provide better resistance to infections.
- **4. Reduced inflammation and faster recovery**
- Cold exposure can reduce muscle pain and inflammation after exercise, which facilitates recovery.
- **5. Stress reduction and mental strength**
- Regular cold exposure and breathing exercises can improve stress management, reduce anxiety, and increase mental focus and stamina.
- **6. Increased fat burning**
- Cold exposure activates brown adipose tissue, which burns energy to heat the body, which can contribute to increased metabolism.

Weight Loss Strategy:

First, some general thoughts

- Sweet gives birth to sweet, if you eat sweets, you want to eat more sweets. It usually takes about 10 days to get used to it.
- Of the calories you consume during the day, protein has the highest degree of satiety in relation to calorie amount. Followed by fat, which has the second highest satiety per calorie. I.e. better than carbohydrates in satiety – believe it or not. Fat also causes the stomach to secrete a hormone so that bowel emptying is slower (precisely because fat takes time to break down) this has a consequence that amino acids from protein are also absorbed more efficiently by the body. So fat and protein work together.
- The choice of carbohydrate source plays a major role in how quickly the body absorbs it. Eating carbohydrates that are extra high in fiber evens out blood sugar levels and thus the feeling of satiety. Fewer calories are then required to achieve the same satiety.
- Vegetables contain a lot of fiber, which increases the level of satiety, and have relatively few calories in them. If you want to lose weight, you should put more vegetables on your plate. For example, carrots, kale and more.
- The plate model: a well-established model that still holds up today. Forget all the weird diets here and there. Eat as you usually do, but use the plate model. And feel free to buy smaller plates to take smaller portions. If you want to lose weight, fill the plate with 50% vegetables.
- Small portions. Large portions stretch the stomach, if you want to train yourself to become fuller faster, it is good to practice eating small portions. Some people do gastric surgery and shrink the stomach, why do I wonder? Better to discipline yourself and get used to smaller portions.
- Eat slowly. The trick here is to buy sticks to eat with, then it's harder to eat quickly.
- Replace unhealthy with healthier alternatives: It's hard to just remove unhealthy things without replacing them with something, then there will be a void. For example, nuts instead of chips. Nuts, unlike chips, contain good fats.
- Remove soda, preferably also alcohol, sandwiches, pasta. Contains a lot of calories in relation to satiety. In addition, you feel sluggish and fermented afterwards.
- Have you eaten right? The answer is quite simple, if you feel sluggish and tired afterwards, you probably haven't eaten very well. Compare the pizza with the food from the Thai restaurant. Often when I've eaten wrong, a negative spiral is set in motion, and I want to fill up with something that is even more unhealthy.
- If you are going to eat or drink unhealthy, do it a maximum of 1 time per week, at most 2 times a week. Why? Yes, it contains a lot of calories, and second, if you take it too often, you wake up your sweet tooth again, which creates a negative spiral again.
- For long-term, healthy and sustainable weight loss, a calorie deficit of about **300–500 kcal per day** is usually recommended. This deficit usually leads to a weight loss of about **0.5 kg per week**, which is a reasonable and manageable rate that reduces the risk of nutrient deficiencies, muscle loss, and negative metabolic effects. A deficit below 300 kcal can be very

slow for weight loss, while over 500 kcal can be more stressful to maintain in the long run and increases the risk of fatigue and muscle loss.

Basic to understand:

Below is the **calorie consumption** for the average adult man and woman in the UK in body size, (may vary slightly depending on the source):

Men

Average length: approx. 180 cm

Average weight: approx. 83–85 kg

Women

Average length: approx. 167 cm

Average weight: approx. 68-70 kg

This applies to people with **a normal activity level** (not sedentary, but also not strenuous), and with **normal body weight** and **average height**.

- **Daily Calorie Expenditure (TDEE) – without hard exercise**
- **Age Men (kcal/day) Women (kcal/day)**
- 18–25 years 2,500 – 2,800 2 000 – 2 300
- 26–35 years 2,400 – 2,700 1 900 – 2 200
- 36–45 years 2,300 – 2,600 1 850 – 2 100
- 46–55 years 2,200 – 2,500 1 800 – 2 000
- 56–65 years 2,100 – 2,400 1 700 – 1 950
- 66–75 years 2,000 – 2,300 1 600 – 1 850
- 76+ years 1,900 – 2,200 1 500 – 1 800

Adjusted for people with **a sedentary lifestyle** – that is, those who have office jobs, study, drive a lot, or generally move a little in everyday life (but are not completely inactive).

- This still applies to people with **average body weight and height**, and **no or very low exercise**.
    - 🪑 **Daily Calorie Expenditure (TDEE) – Sedentary Lifestyle**
    - **Age Men (kcal/day) Women (kcal/day)**
    - 18–25 years 2,200 – 2,400 1 800 – 2 000
    - 26–35 years 2,100 – 2,300 1 700 – 1 900
    - 36–45 years 2,000 – 2,200 1 650 – 1 850
    - 46–55 years 1,900 – 2,100 1 600 – 1 800
    - 56–65 years 1,850 – 2,050 1 550 – 1 750
    - 66–75 years 1,800 – 2,000 1 500 – 1 700
    - 76+ years 1,700 – 1,900 1 450 – 1 650

Here is a clear table for people with a **very active lifestyle** – i.e. those who:

•Train **almost every day** (5-7 sessions/week)

•Are **physically active at work** (e.g. construction workers, healthcare workers, instructors, bicycle couriers)

• Moves a lot even outside of training (walking, cycling, playing with children, etc.)

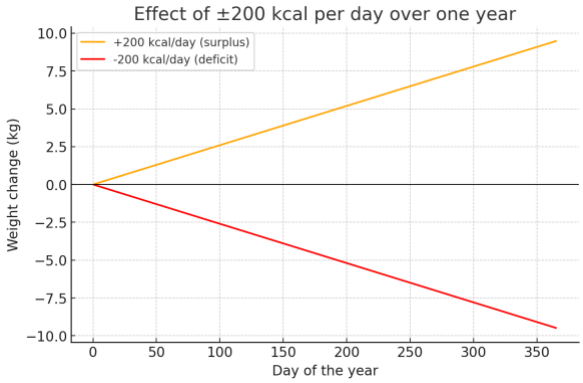
This group has **high energy expenditure** and needs more food to recover and function optimally.

- **Daily Calorie Consumption (TDEE) – Very Active Lifestyle (Applies to average height and body weight)**
- **Age Men (kcal/day) Women (kcal/day)**
- 18–25 years 2,900 – 3,300 2 400 – 2 800
- 26–35 years 2,800 – 3,200 2 300 – 2 700
- 36–45 years 2,700 – 3,100 2 200 – 2 600
- 46–55 years 2,600 – 3,000 2 100 – 2 500
- 56–65 years 2,500 – 2,900 2 000 – 2 400
- 66–75 years 2,400 – 2,800 1 900 – 2 300
- 76+ years 2,300 – 2,700 1 800 – 2 200

What is meant by "very active"?

- ✔ Exercising 1+ hours a day (strength, cardio or sport)
- ✔ Walks 10,000+ steps/day
- ✔ Have a physical job or active leisure time
- ✔ The body recovers quickly from exercise

Here you can see the effect of a **small daily surplus or deficit of 200 kcal**:



- **+200 kcal/day → almost +10 kg in a year** ⚖️
- **–200 kcal/day → almost –10 kg in a year** ⚡

It shows how small everyday habits (an extra soda or skipping a small snack) can have **a big impact over time**.

Not sure how many calories a certain diet contains? Use the Lifesum app or a simple Google search

Some thoughts on the above linked to Diet

- Find out what your daily consumption is on approximately the days you don't exercise
- Use it as a yardstick in your diet
- Lie a maximum of 250 kcal during your resting metabolism = 1kg/month approx.
- Do 72 hours of fasting 1 time/month to speed up and raise discipline
- The days you exercise are enough to make a bonus for your weight loss in number of calories (=250kcal+activity calories, about 700kcal more). A bag of chips or chocolate bar of 100g contains about 550 kcal to compare with.
- When you reach your goal, change the amount of calories to the daily consumption in the amount of calories at rest, regardless of whether you exercise or not, you are on the same amount of calories except for an extra protein drink after the workout
    - This gives you a buffer for the day you want to eat slightly worse food per week.
- Goal 2: maintain your weight for 1-2 years. Then the body adjusts and is in balance with the new weight. Perhaps the most difficult and important goal to achieve
- A consolation. However, it takes clearly less effort to retain a certain muscle mass than to build it up. As little as a third of the amount can be enough, like 1-2 sessions a week.

Info on maintaining weight

Yes – there is quite good research and experience on this, although exact numbers vary between individuals. Here's a breakdown of what we know:

Timeline of when the body begins to accept a new weight:

0–3 months: "The Defense Zone"

- The body is often still in "resistance mode".
  Hormonal changes such as increased hunger, cravings and decreased metabolism are strongest here.
- Weight gain is most common during this phase if you relax completely.

3-6 months: Beginning of stabilisation

- Hunger hormones such as leptin and ghrelin begin to stabilize somewhat.
- The body slowly begins to get used to lower energy intake.
- There is still a risk of regression if old habits creep in, but it will be *a little* easier to maintain the weight.

6-12 months: First big threshold

- For most people, the body starts to "accept" the new weight more here.
- Metabolic rate (RMR) has often reached a new balance.
- Satiety signals work better, cravings decrease.

12–24 months: A new set point is established

- After one to two years, the body perceives the new weight as normal.
- The hormonal and metabolic adaptation has basically stabilized.
- The risk of the body "pushing back" to previously higher weight is significantly lower.

So the answer is:

- For most people, you need to keep your weight stable for **at least 6-12 months** to feel that your body has started to accept it. But for **long-term biological stability**, where the body **is no longer fighting back**, 12–24 months **are often needed**.

Bonus effects (what speeds up the diet extra)

- Interval workout running – increases resting metabolism about 24-36 hours after the workout
- Strength training – increases the metabolism 12-48 hours after the session, ffa the first 12 hours
- Light jogging session (burns during the session + 1-2h after the session)

- Increased muscle mass increases resting metabolism per day (if not so much, for 5kg of muscle about 65-75kcal per day), the more burning when exercising with more muscle (5kg more muscle increases metabolism by 200-300kcal/h)
- Increased muscle mass gives a greater burning engine for fat, also increases insulin sensitivity (i.e. the body needs less insulin), (which makes the body better at using fat and carbohydrates as energy instead of storing as fat, i.e. hormone that affects the cells' ability to absorb glycogen). More insulin contributes to the body breaking down fat less well.
- Once you have muscle mass, it's easier to maintain it than to build it up from scratch.
- Maximise your protein intake to 2.2g per kg of body weight without exceeding your daily calorie intake target. It maximizes muscle growth. (And the older you are, the more protein is required to be able to absorb the same amount – balance for the sake of the kidneys, though)

To illustrate: Healthy diet (2000 kcal, ~130 g protein) **VS** Unhealthy diet (about 4600 kcal, ~100 g protein)

Breakfast

- Healthy: Porridge + quark + berries + nuts → 450 kcal, 30 g protein
- Unhealthy: 2 pastries + latte → 700 kcal, 10 g protein

Snack 1

- Useful: Protein shake + banana → 250 kcal, 20 g protein
- Unhealthy: — (no snack here)

Lunch

- Healthy: Salmon + quinoa + salad → 550 kcal, 35 g protein
- Unhealthy: Pizza Capricciosa + soda → 1200 kcal, 40 g protein

---

Snack 2

- Healthy: Edamame beans + apple → 200 kcal, 15 g protein
- Onyttig: Chips (100 g) + cola → 700 kcal, 7 g protein

Dinner

- Healthy: Chicken + sweet potatoes + vegetables → 500 kcal, 30 g protein
- Onyttig: Hamburgermeny (stor) → 1200 kcal, 35 g protein

Evening meal

- Healthy: Quark + chia + raspberries → 250 kcal, 15 g protein
- Unhealthy: Sweets (150 g) + ice cream → 800 kcal, 8 g protein

---

Totalsumma

- **Useful day:** about **2000 kcal**, **130 g of protein**
- **Unhealthy day:** about **4600 kcal**, **100 g protein**

Conclusion: The healthy day provides **half as much energy but more protein**, better nutrition and less risk of weight gain/inflammation. The unhealthy day skyrockets calories without adding as much building blocks for muscle and health.